MEDICAL REVIEW

A Weekly Journal of Medicine and Surgery

VOL. XL, No. 12
WHOLE No. 943

ST. LOUIS, MO., SEPTEMBER 23, 1899

YEARLY SUBSCRIPTION, $1.00
SINGLE COPIES, FIVE CENTS

Original Articles

DEMONOLOGY IN MEDICAL PRACTICE.

BY JAMES G. KIERNAN, M.D., Chicago, Ill.

THE medical press, from time to time, in discussing what has been entitled the recrudescence of superstition as exemplified in faith healing, "Christian Science," and other phases of folklore, has pointed out that the recrudescence was often the result of financial conditions which placed people, both American and foreign, of superficially high but practically low grade of culture in a commanding position because of their financial status. The witchcraft delusion, for instance, maintains its hold among the Pennsylvania Dutch in certain districts of New Hampshire, Vermont, and Maine, as well as in the South. When people of this grade of culture emigrated (in consequence of increased wealth due to the accidental discovery of petroleum, mines, and lumber, etc.) to the cities, they exercised an intellectual influence on newspapers, magazines, etc., which was out of all proportion to their own mental calibre and directly due to their financial status and such social advantages as arose from this. Furthermore, the emigration from the British Isles and the continent of Europe brought people of the same grade of culture who likewise arose in financial status but retained full belief in all their folklore. Some American types of this grade of culture naturally gravitated to "Christian Science" as they did to "metaphysical medicine" and Hahnemannia. Indeed the great apostle of "Christian Science," "Mother" Eddy, began thirty-three years ago as a "metaphysician." But many American and European phases of folk-medicine retained prehistoric characteristics. Thus "Dr." Paul Wachter was arrested and sentenced to the penitentiary in Chicago in 1894 for obtaining money from wealthy North Side Germans to cure disease by putting it in a magic tree. As he employed the money in worship of Gambrinus rather than of the dryads, his dupes had him arrested and imprisoned for obtaining money under false pretences. His detection, however, seems to have failed to destroy superstition among the class gulled. An individual was recently arrested for trying the same confidence game on exactly the same class of people. This new aspirant for magical fame claims to possess a magic mirror given him by the Devil by which he is able to cast a spell over the people who fail to believe in his pretentions or to comply with his demands for money. A sixty-year old woman paid him twenty dollars under threats of a "spell" and promises to cure blindness. His usual method of operating was to call at houses of Germans or Poles in North Chicago and ask if anyone were ill. To the invalid he would show a small mirror bidding him look therein and be healed. The procedure in this particular resembled certain methods adopted by hypnotists. If the invalid claimed to feel better, money was demanded with a threat to cast an evil spell if the demand were not complied with. In one instance the mirror man threatened to kill chickens by a spell and to poison a husband if his demands were not met. He also claimed to exercise considerable influence with the Devil, and excited the neighborhood against people who refused to comply with his demands by claiming they were guilty of witchcraft, causing disease. Some of the "Pennsylvania Dutch" "witch doctors," by such accusations, more than once caused riot and attempted homicide. This was notoriously the case with the famous "Witch Doctor Amend," of Pittsburg, Pa., who died in 1895. These "witch doctors" among the Italians of New York are called "Devil's Doctors." Their procedures in treating disease in that city are as follows: They first blow something in the patient's face and afterwards scarify his hands, feet, and body with a razor until the blood flows freely. This blood is rubbed over the chest or other part affected. Then the patient's hair is cut off and a letter is written to "Satan, Prince of Hell." The letter and the hair are then burnt. These procedures are repeated for four days. In Paris, France, Satanism of the type described became, some few years back, a fashionable cult and had its ceremonies with a ritual resembling the famous Sabbath of the witches of the seventeenth century, which has been so vividly pictured by Hawthorne. About a year ago both West Virginia and some other States had witchcraft epidemics among the whites. In West Virginia the epidemic required governmental interference. These recrudescences of fetichism do not illustrate that either the age or the race is degenerating, but that commercial changes are placing people at a low

grade of culture in positions where their superstition and fetichic creeds receive support. The influence of this commercial element is singularly well illustrated in Chicago by the suppression of statements as to the use of the "temporal" means by Dowieites from reports of the Chicago Associated Press, by three of the Chicago dailies. It is further illustrated in the fact that an evening newspaper defends the "Devil Doctor," who gulled the North Side Chicagoans. In part, this newspaper prejudice against reputable medicine arises from the stand taken by physicians against nostrums and advertising quacks. But it also arises from the control of the press by syndicates, whose members, coming from the lower grades of culture, support their superstitions when they become wealthy. The rapidity and carelessness with which bail is granted faith healers guilty of causing death through criminal carelessness in the use of "temporal" means, indicates that not a few of these fetichists have been placed on the judicial bench.

STRANGULATED HERNIA, COMPLICATED WITH RETAINED TESTICLE AND INTRA-ABDOMINAL HYDROCELE OF THE CORD.*

By JULIUS KOHL, M.D., Belleville, Ill.

A. B., a young man, eighteen years of age, fine physique, nearly six feet tall, with first-class family history, was suddenly taken ill while at school in Belleville on Friday, suffering from a severe pain in the right inguinal region.

He went to his home at Mascoutah immediately. Dr. A. J. Fuchs, the family physician, was called and readily diagnosed an impacted inguinal hernia. Together with Dr. W. P. Henrich, he tried reduction by taxis long enough to be convinced that it required further operative steps to give relief. Saturday night I was called to assist. The country roads were in an impassible condition, and there being no further trains for Mascoutah that night, I could not reach the patient until the next Sunday morning, about forty-eight hours after the first symptoms of pain had appeared. My son, Dr. A. M. Kohl, accompanied me. The following conditions presented:

A tumor about six inches long, four inches wide, with an elevation in the center of one inch, was situated obliquely in the right inguinal region, beginning at point about two inches above the middle of Poupart's ligament and extending upward. The integument had assumed a livid appearance. Therefore any further attempts at taxis were out of question.

While preparing the patient for the operation, it was discovered that the right testicle was missing in the scrotum. An incision two and one-half inches long was made through the skin and fascia, and by careful dissection a dense cyst was reached. It was black in appearance, distended to its utmost, and permitted of no manipulation whatever, partly on account of its immobility, and further because the walls were in a necrosed condition, which necessitateted careful handling.

A small exploring needle was introduced and a thick, dark fluid discovered, having a decided fecal odor. The opening was then enlarged, and over a pint of fluid withdrawn. The protruding loop of the bowel and the missing testicle could now readily be distinguished with the finger. After a thorough cleansing of the parts, and removing as much of the necrosed sac as possible, an attempt was made to reduce the bowel. But for some reason or other it could not be done. The internal ring was not tense and sufficiently large to permit the point of the index finger to enter.

The testicle was situated just in front of the ring, and while making traction on the cord for the purpose of ligating, prior to castration, a small cystic tumor adherent to the cord slipped out of the abdominal ring. It had the shape of a flattened hickory-nut of medium size. This tumor internal, and the testicle external to the ring, had caused the obstruction to the reduction of the bowel. The spermatic vessels were now ligated, and cyst, cord and testicle removed; so also all of the necrosed tissue of the sac and inguinal canal within reach. The bowel was then readily reduced. On account of the great extent of unhealthy tissue of the inguinal canal, union by first intention could not be expected. On the other hand it was desirable to close the wound pretty firmly. We therefore concluded to reduce the drainage material to a minimum size, and for that purpose we used heavy double-braided silk in ligating the spermatic vessels, leaving the ends long enough to answer for drainage.

The plan proved to be a success. Suppuration followed. By careful management, however, the patient made a rapid, perfect and eventless recovery.

Cases like the one described are of rare occurrence, and it is a duty to report them. I am aware that the surgical literature abounds with similar cases. Dupuytren drew attention to them probably as early as any writer. But more exact data of retained testicle and their pathologic complications are of more recent date. The most exhaustive reports have been furnished by Kocher.

From my own experience, by continued opportunities for observation in hospital and private practice, I can state that complications as appeared in this case seldom present themselves.

In the study of this case, the first question present-

*Read before the Society of City Hospital Alumni, May 18, 1899.

ing is: "How could so much fluid accumulate without being noticed sooner?" Undoubtedly, the pathologic conditions described had existed for a long time. It was only the dilatation of the internal ring by the continued pressure of the accumulating fluid that made it possible for the bowel to escape. This occurrence started the alarm clock and led to the discovery of the case. The patient's mother had only a faint recollection of the congenital imperfection of the son from the time of his childhood.

The fecal odor and dark discoloration of the fluid, which let us suspect an intestinal lesion in the beginning of the operation, can only be explained by the theory of osmosis. Encysted hydrocele of the cord is of more frequent occurrence than is commonly supposed. I have often found it in connection with hydrocele of the testicles. I remember a case where this existed on the right side of an elderly gentleman. He made a good recovery after the radical operation. Several years later the same disease developed on the left side.

I have found these cases so often, that for many years I have discarded every other treatment for hydrocele, except the radical operation. I have never met with a failure, a recurrence of the disease, nor any other deleterious results, while with the old injection methods I have had nothing but disappointments. It is necessary to look for those additional cysts of the cord. This is rational surgical treatment.

A CASE OF GUNSHOT WOUND OF THE ABDOMEN FOLLOWED BY OPERATION AND RECOVERY.

BY JACOB FRANK, M.D., Chicago, Ill.

Surgeon to the German Hospital, Consulting Surgeon to the St. Elizabeth Hospital, Home for Aged Jews, Chicago Jewish Orphan Home, Etc.

THE following case, while it presents no startling features, is deemed worthy of being recorded, as it will probably have some weight in deciding whether to operate or not in similar cases.

On the afternoon of July 26, 1899, Mrs. A., mullato, aged 23 years, was brought to the German Hospital, suffering from a gunshot wound of the abdomen. The wound was accidently inflicted with a thirty-eight caliber revolver held only a few yards from the body. I saw the patient six hours after the injury. She presented no symptoms of shock and complained of but little pain. The most of it was referred immediately back of the point of entrance of the ball in the region of the kidney and about the uterus. As she was menstruating at the time she thought the latter due to this, but as the bullet was found in the cul-de-sac of Douglas, the increase of pain is well accounted for here. The pulse was strong and regular, and there was no emesis, faintness, nor dejection from the bowels. There was no distension of the abdomen, and percussion and palpation failed to locate the missile or any hypersensitive areas. On examination, the ball was found to have entered the abdomen in the left hypochondriac region, two inches below the last rib on the left axillary line. It was a wound of entrance, as no wound of exit was found.

The patient readily consented to an operation, and under chloroform anesthesia and the usual aseptic precautions, it was undertaken. The bullet wound was enlarged and the finger introduced, but failing to detect the ball or an opening in the peritoneum, an incision six inches long was made to the left of the median line on the outer border of the rectus muscle, commencing one and one-half inches above the umbilicus and extending downward and inward towards the mons veneris. A small quantity of fluid and some blood were found in the peritoneal cavity, but no traces of feces. She was eviscerated, the parts being protected by warm towels, and it was found that the bullet after penetrating the walls of the abdomen and perforating a part of the small intestines and bruising two or three portions, as was shown by a marked ecchymosis, had dropped into the cul-de-sac of Douglas from whence it was extracted. It must have injured some of the small vessels in the neighborhood of the broad ligament, as considerable oozing took place from this point. The portion of the gut perforated was resected and a one and one-eighth inch Frank's coupler introduced, the size being determined by measurements with my enterometer, and the anastomosis completed. In another place where the peritoneal and muscular coats only were injured, the closure was made with Lembert sutures. A gauze drain was introduced in the bullet-wound incision and also one in the upper end of the surgical incision. At the lower end of the surgical incision a modified Mikulicz drain was inserted into the cul-de-sac and withdrawn after thirty-six hours. The patient rallied from the anesthesia nicely and suffered no shock after the operation, which occupied about one hour. The temperature in the evening was 102.2°, per rectum, but dropped to 100.2° on the following day, hovering between this and 100° for about five days, when it returned to normal.

On August 8, 1899, thirteen days after the anastomosis, the piece of rubber tubing passed. The patient left the hospital August 23, 1899, enjoying her usual health.

Two points were well shown in this case:

1. Operate at once and do not wait for symptoms of perforation of the intestines to occur, as the operation may be too late.

2. The exploration of the abdomen should be thorough and a free incision large enough for this purpose should be made.

17 Lincoln Avenue.

Notes and Items

The Charité Hospital in Berlin is in the process of reconstruction. Nearly three million dollars will be spent in rebuilding the institution, and it will be one of the best equipped large hospitals in the world. Not only will all the special teaching departments be provided for, such as the pathologic museum and department for bacteriologic study, but in addition there will be special departments for hydrotherapy, serum treatment, etc.

Some idea of the devastation and loss of life is contained in the Puerto Rico Board of Health report. It is reported that 2,312 burials of the victims of the recent hurricane have been held. In addition, 1,000 families are missing, as well as their homes. The number of destitute is reported as 250,000. These must be sheltered and fed during the next four months until the crops are harvested. There is not a little disease growing out of the destitution, and the injured are many. These require medical aid and medicines, and a large proportion of the relief funds collected must go for this purpose.

Hypertrophied tonsils may have some relation to decayed teeth. Dr. Kuhn, who examined four hundred children in Hanover, found in 75 cases of bilateral hypertrophy, 296 decayed teeth, while in 24 cases of unilateral hypertrophy there were 101 diseased teeth. The conclusion of Dr. Kuhn is, that the tonsillar hypertrophy has some relation to the diseased teeth and that better care of the teeth would lessen affections of this character. This conclusion is by no means warranted by his cases, as the reverse may be true. This is by no means improbable, as large faucial tonsils are often associated with adenoids, and these being complicated by mouth breathing, it may be easily seen how the latter may be associated with decayed teeth. It is well to remember that these local troubles of the throat are generally combined with a deficient nutrition and general state of the system, notoriously predisposing to early decay of the teeth. The conclusions of Dr. Kuhn again illustrate the falsity of the dictum, that because two phenomena are associated, they are necessarily in the relation of cause and effect.

In view of the early opening of the drainage canal, by which the sewage of Chicago will be turned into the Chicago River, it is interesting to note that an indignation meeting has been held by the citizens of Cumberland against the continued pollution of the Potomac River. The United States Marine Hospital service has undertaken an examination of the Potomac River water. At numerous points pathogenic bacteria were found. Colon bacilli were found in thirty-six places between Piedmont and Washington city. The report concludes with the statement: "The causal relation between impure drinking water and this death rate is so evident, that to my mind it is almost criminal negligence to allow such an easily preventable condition of affairs to longer obtain in our midst, and it can be truthfully said, that just so long as the inhabitants of this district are compelled to use Potomac water in its present state of pollution, from 200 to 250 lives will be needlessly sacrificed annually."

The cry that there are too many physicians, finds its echo in the clerical profession. A recent statement from a leading divine in the *Hartford Courant* is quoted by the *New York Medical Journal*, and is to the effect that only about seventy-five per cent. of the ministers are able to obtain a pastorate. Notwithstanding the efforts of the Home Missionary Society, only about seventy-four per cent. of the churches are able to support a minister. This gives the church five hundred surplus ministers. From this it follows that it is not possible for the theologic seminaries to introduce young men into the ministry without driving out an equal number of men who were in work. There are many men of the highest qualifications who cannot secure a pastorate under existing conditions. A plea for financial aid in the seminaries on the ground that an increase of educated ministers is needed at the present time is therefore of doubtful justice. This statement shows that the clerical, like the medical and legal professions, is enormously overcrowded. Notwithstanding that this statement is reiterated over and over, in both profession and lay papers, the cry is "still they come."

The suicides in New York City are said to have numbered 160 during the first three months of the current year. Fifty-five of these were by taking carbolic acid, thirty-four by shooting, thirty by inhaling gas, seventeen by hanging, and the remainder by stabbing, drowning, and leaps of various kinds. A curious paragraph in legal medicine is that which notes the frequency of suicide by carbolic acid. From one occasionally a few years ago, it has increased until it now heads the list. For a long time, arsenic, usually in the form of rat poison, was the favorite lethal dose, but of late this method has fallen far to the rear. Next to carbolic acid, shooting seems to be the most popular, and it is only of late that statistics show that carbolic acid has exceeded in number the cases of shooting. Undoubtedly this is largely due to the fact that carbolic acid is so easily obtained. It is largely employed in domestic medicine, and the laity have learned of its poisonous properties from the poison labels which decorate every bottle and probably more from the extended notice which these cases receive in the public press. The laws of some states do not require that carbolic acid be placed among the registered poisons. These conditions have led to its extensive employment as a means of suicide.

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A WEEKLY JOURNAL OF MEDICINE AND SURGERY

EDITED AND CONDUCTED BY

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YEARLY SUBSCRIPTION, $1.00

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Entered at the St. Louis Postoffice as Second-Class Matter

THE INJECTION OF ANTI-TETANIC SERUM IN THE SPINAL CANAL.

Schultze has reported a case of tetanus treated by the injection of anti-tetanus serum into the spinal canal. The case recovered. Quincke's lumbar puncture was performed, and the fluid which was withdrawn was replaced by anti-tetanus serum. The disease in this case was not severe, and at the same time anti-tetanus serum was used hypodermically. This seems a much more rational procedure than injecting the serum into the subdural space. It not only avoids opening the skull, but it brings the remedy in closer relation with the spinal cord, which seems to be the portion of the nervous system chiefly involved in tetanus. There is also a possibility that the spinal puncture may get relief of some of the toxins. Lumbar puncture is not performed as frequently as it should be, and there are many theoretical considerations which would lead one to think it would be of value in cases of tetanus.

SURGERY IN THE DAILY PAPERS.

A dispatch recently published in the *Chicago Inter-Ocean*, from Wabash, Indiana, is printed under the title, "Woman Strangely Afflicted." It is stated that "Mrs. William Morton, of Allen County, is lying in a precarious condition from a rare affliction. For three weeks she has been unable to swallow and has received nourishment only through hypodermic injections. Mrs. Morton has stricture of the æsophagus, the canal which carries food from the mouth to the stomach, and recently another complication, bifurcation of the wind-pipe, appeared. She is extremely weak, and, recognizing that death must shortly ensue, unless there is prompt relief, has decided to submit to an operation."

The report leaves us in doubt as to whether the operation is to be undertaken to remedy the "bifurcation of the trachea" or whether it is for the purpose of relieving the stoppage of the esophagus. The latter, we think, is more probable, as we have never regarded "bifurcation of the trachea" as an exceedingly dangerous condition—certainly not one that would reduce a patient to the last extremity of starvation.

CREMATION BY LIQUID AIR.

The importance of a proper disposal of dead bodies cannot be over-estimated. The present method of earth burial is filled with such dangerous consequences to the health of the community, and has withal so many objectional features, that a substitute has been earnestly sought. Cremation is growing in favor, and as an ultimate reform there can be no doubt of its general adoption. Many years, however, must elapse before anything like a universal adoption of the custom will be accomplished. According to the *Interstate Medical Journal*, August, 1899, liquid air is now being utilized as an agent for the cremation of the human body. Mr. Tripier, who has done so much work with liquid air, has demonstrated that this substance will almost instantaneously solidify flesh of all kinds. In this state it becomes very brittle and can be broken in an incredibly short time into small particles. A Mr. Seamans, of Chicago, suggested that this property of liquid air be employed in the disposal of dead bodies. His process consisted of first freezing the body with liquid air and then placing it in a bag and crushing it between heavy rollers into fine powder. It is stated that a burning process has been employed at Nyack which is even better and quicker than this. The bodies are placed within a retort, and in a short time liquid air dissolves the entire body except the chalky parts of the bones. The entire process lasts but a few minutes.

THE EXCEPTIONS IN LEGAL MEDICINE.

W. H. Taylor, in an interesting address on "Relations of the Coroner to the Undertaker," in speaking of a case, said that the prime question to determine was, "When did Lillian Madison die?" The prescribed methods for answering the question were resorted to, and then an effort was made to interpret the result by the help of the authorities. The result of this search revealed that "rigor may set in before death, at death, and at any time after four days after death; it may persist no time at all, or no appreciable time, up to three or more weeks; the most usual time is within two hours, and three, and four, and five, and six hours after death; it always appears in the upper limbs before it appears in the lower; it always appears in the lower limbs before it appears in the upper; the order in which the parts are affected is uniformly the same, and the order in which the parts are affected is

not uniformly the same. As for rigor, it may be complete within two hours, and within three days, the most usual hours being within eight hours, and twelve hours, and fifteen hours, and twenty-four hours." "When, by means of these and other like data, I had obtained an approximate period, I was instructed to correct and fix it by a suitable application of the modifying circumstances of age, sex, state of nutrition, cause of death, season, weather, etc."

The above quotation illustrates one of the great difficulties in medical jurisprudence. The "authorities" are so confusing it would be much better if they stated the impossibility of determining the time of death within wide limits. In the majority of cases the aim is to show that science is able to prove too much. It would be better for medical experts, and for the cause of justice in our courts, if we recognized more fully the limitations of science, and took conservative ground in formulating possibilities or probabilities in a given case.

THE DIAGNOSIS OF ECLAMPSIA.

The treatment of this condition depends very largely upon an early diagnosis. There is no disorder that better fulfills the statement, that the best way to treat a disease is not to have it, than this; in eclampsia, an ounce of prevention is worth many pounds of cure. Prevention in these cases depends upon an early recognition of the pre-eclamptic state. This is determined by an investigation of the urine. The danger signal connected with urinary excretion relates to the presence of albumin, diminution in the total quantity of urine, or lessening in the amount of urea. By far the most valuable of these three symptoms is the lessening of the total quantity of the urine, because it is a symptom that may be observed by the patient herself. It is an exceedingly easy matter for the person to measure the total quantity of the urine, and any marked diminution can be at once reported by the patient to the physician. It is exceedingly rare that a total quantity amounting to 1,000 cm. is ever followed by eclampsia, even when the urine contains considerable quantities of albumin. This large quantity of urine seems to carry off the poisonous substances which determine eclampsia, and any sudden fall in the quantity should rouse suspicion and be followed by most energetic treatment.

Albumin is undoubtedly present in the vast majority of cases that terminate in eclampsia, but unfortunately it is not always present when sought for. The particular specimen examined may not reveal a trace of albumin, and consequently the general symptoms which had directed the attention of the physician to the urine are believed to have their origin in some other conditions than the kidneys. In this way the physician is lulled into a false security from which he is rudely roused to the treatment of an eclamptic seizure. While the presence of albumin has some diagnostic value in the early recognition of this disorder, it is not nearly as important as the falling off in the quantity of urine excreted. What is true of albumin is true of urea. In the vast majority of cases this substance is diminished in the pre-eclamptic state, but its quantitative estimation requires chemical analysis, and is usually confined to one or two examinations. The chief advantage, from a diagnostic standpoint, of the quantity of urine is due to the fact that the patient can make the examination herself, and in suspected cases the observations can be made from day to day, or two or three times a week, and in this way early notice will be given of a change in the secreting powers of the kidneys.

CAUSE AND PREVALENCE OF LEPROSY.

Jonathan Hutchison has recently discussed leprosy in all of its bearings. He reaffirms his previously expressed views that the disease is caused by a fish diet, particularly a diet composed of uncooked, dried fish. Unhygienic surroundings are an important associated factor. He points out that leprosy finds a congenital habitat along the seashore, where fish is the most important food of the inhabitants. A change of occupation of the inhabitants, an increase in agricultural pursuits, and an improvement in material conditions has always been followed by a disappearance of the disease. The wide prevalence of leprosy all over central Europe and England in the Middle Ages is a fact that is frequently lost sight of at the present time. There was a large leper hospital founded in 1089 near Canterbury. Twelve years later there was a large hospital founded in London and another in York. The succeeding two or three hundred years witnessed the establishment of a large number of leper hospitals throughout England, one of the largest being at Sherbourne, near Durham. After the Reformation leprosy decreased so rapidly in England that the hospitals for these patients were used for those with other diseases. The disease was equally prevalent in Ireland and Scotland; in the former country more than eighteen leper establishments were maintained. The last authentic case of the disease occurred at Waterford in 1775. In Scotland the disease did not finally disappear until the beginning of the present century. Mr. Hutchison believes that leprosy is only mildly contagious and that it is not necessary to segregate these patients. In those countries which have established leper hospitals and in which there has been a marked decrease in the disease, it is rather to be attributed to the improved hygienic conditions and increased foreign trade, than to the segregation of the patients.

Society Proceedings

MEDICAL SOCIETY OF CITY HOSPITAL ALUMNI.

STATED MEETING, THURSDAY EVENING, MAY 18,
THE PRESIDENT, DR. GEO. HOMAN, IN THE CHAIR.

DR. GIVEN CAMPBELL presented two patients in whom the diagnosis was rather obscure, but he thought in both there had been an attack of

Cerebro Spinal Meningitis.

In one of the children there was a history of acquired tuburculosis on the father's side and the mother now had what appeared to be a broken down tuberculous gland. This child was well until sixteen days ago, when it was taken with a severe form of constipation. Was sick for four days and complained of headache, but seemed to make a perfect recovery as far as physical health was concerned, but after that he was unable to walk. There was no paralysis, but there was absence of co-ordination. Within four days after that the hearing was entirely lost. He is absolutely deaf. The bony conduction of sound was also absent as far as he could test. There are cases which show signs of destruction of hearing and a similar destructive process in the retina after acute cerebral inflammation. In this case the eyes appeared to be normal. Dr. Campbell said he thought the child had suffered from a slight attack of meningitis—one of those so-called abortive attacks—and the membrane lining the internal ear is supposed to be frequently affected with the meninges, due supposedly, not to an involvment of the auditory nerve but to an invasion of the internal ear. The other child, aged nine months, is Syrian by birth. Three months ago he was taken with vomiting, constipation, retraction of head, slight deviation of the eyes, and fever. He was sick quite a long while and probably had cerebro-spinal meningitis. There is now paralysis of the head muscles. The peculiar point about the case and the only one of special interest is that from the time of the disease, fifteen weeks ago, the child commenced to have a growth of hair upon its body, which makes the case most unique.

DR. R. B. H. GRADWOHL said he had seen one almost exactly like the first case at the City Hospital. While in the hospital he had undertaken a bacteriologic examination of the cases seen there and had drawn a chart of the main symptoms, whether present or absent. In one of the cases which recovered there was the same condition of complete deafness on both sides. In looking over the literature on the subject he found the explanation was that the trouble extended along the auditory nerves. He thought Flexner of Johns Hopkins offered this explanation.

DR. CAMPBELL asked the speaker if he meant that the trouble extended along the nerve with involvement at the terminations of the nerve trunk.

DR. GRADWOHL thought it was the nerve trunk. He said they described degenerative conditions found in all the cranial nerves, and that the optic, auditory fourth, fifth and sixth were most often involved. In the cases he had himself examined he had found that the optic and third and fourth nerves were most often involved. The chart was self-explanatory in regard to the clinical aspect of the cases. The mortality was 62½ per cent.

Asked if he had examined the tympanum, the speaker said he had and had found trouble in the ears of five or six cases, but not in the rest. One case was that of a woman who had gone to a doctor for ear trouble for two days, when she suddenly became unconscious and the post mortem showed she had meningitis. In most of the cases he had performed lumbar puncture.

DR. LOVE asked if the sign of Kernig was found in all cases and Dr. Gradwohl said it was.

DR. JOHN GREEN, JR., asked if in the case which was believed to have started with otitis media, he had found the diplococcus intracellularis.

DR. GRADWOHL said he did. He further referred to this case as it was very interesting. The woman was seven months pregnant, and three days before entering the hospital she developed pains in the ear with a little discharge. She consulted a physician who injected something into the ear. The next day she became unconscious and was brought to the hospital, where she showed all signs of meningitis. This was about eight o'clock in the morning and during the examination the fetus was found to be dead. The woman died about four o'clock in the afternoon and post mortem showed that both mother and child had meningitis; the bacteriologic examination of the fluid showed the diplococcus intracellularis in both cases, showing that it was transmission in utero of the disease. The fluid from the ears was also examined and the diplococcus was demonstrated, showing that it was an extension of the disease.

DR. REDER said he noticed that sugar was found in two cases and that both had died. He asked Dr. Gradwohl if this was always considered symptomatic of the disease.

DR. GRADWOHL said no. He thought, however, that it showed some relative involvement of the ventricles. In the case just mentioned where the disease had been transmitted in utero, the woman had sugar in her urine and the ventricles contained a good deal of the exudate. But he did not think it was found so very often.

DR. MEISENBACH asked if the aspect of the cases changed any after lumbar puncture had been performed.

DR. GRADWOHL said there seemed to be some im-

provement in one case while in another the symptoms were aggravated apparently; in other cases no change was observed. The puncture was harmless and extremely valuable as a diagnostic measure.

DR. I. N. LOVE said the growth of hair on the child was very rare, yet not surprising. He asked Dr. Campbell if he had not observed other cases of a similar increase of the growth of hair in neuroses among women in particular. He said he had heard of several neurotics where it had developed, although he himself had never seen a record of such a case.

DR. M. W. HOGE said that it would have been much more satisfactory if Dr. Campbell had seen the first case during its illness and had been able to give a more definite history during the acute stage. From the history obtainable, however, he said he would by no means be certain that it was a case of meningitis, because all the symptoms mentioned might be present in disease of the internal ear, especially if of an inflammatory character. The short duration of the attack and prompt recovery, with the exception of the hearing, was rather against meningitis. As to the manner in which meningitis might produce bilateral deafness he believed Dr. Campbell's opinion was the accepted one, and, as Dr. Gradwohl had explained, also supposed to be due to an extension of the inflammation along the canal traversed by the auditory nerve and involving structures of the internal ear. Therefore he thought the condition now present was, in all probability, due to an inflammation of the labyrinth, and as such inflammation might give rise to all the symptoms described he did not think it at all necessary to suppose that meningitis existed. Bilateral inflammation of the internal ear—that is, of the labyrinth of both ears at the same time—is an affection which is not so extremely rare, though not met with very frequently in general practice, and the causes are not definitely settled.

DR. JOHN GREEN, JR., asked Dr. Campbell whether he had noticed in connection with the case any strabismus, ptosis or nystagmus, and whether the fundus of the eye had been examined by the opthalmoscope, and, if so, what was found.

DR. CAMPBELL, in closing, said his diagnosis of meningitis in both cases was provisional; he was not sure that either child had meningitis. In the one with deafness the sign of Kernig was still present. In the other case he agreed with Dr. Hoge that there was considerable doubt. There was a prevalence of the disease in the city at the time, however. He said he was aware that there was that acute bilateral disease of the internal ear which has a predilection for that particular nerve tissue. The reason he thought there was probably meningitis and not an inflammation of the internal ear was the presence of vomiting with constipation; that was a strong indication of acute inflammation, and the fact that the child was unable to walk for two weeks would point to either one. He thought that the disease was meningeal deafness, due more to an involvement of the internal ear itself than to the disease, the loss of function resulting in an involvement of the nerve trunk. Most cases of meningeal deafness do not have visual involvement except in rare cases, while it is common to have deafness in connection with meningitis and without bony deafness. In answer to Dr. Green's question, he said he was sorry that no examination of the fundus had been made, but it was not practicable. The child was absolutely deaf, and no tests could be made, as no communication could be held with her. It was a sad case, he thought, because the child had been bright and intelligent, but was now beginning to pay little attention to persons and things around her and would soon, he feared, be a deaf mute. For treatment he had been using the iodides in both cases, with the idea of hastening resolution of any exudate if present. In the older child he was using the syrup of iodide of iron, and the one with the overgrowth of hair, the iodide of potassium. The case with the overgrowth of hair he thought unique, considering the age of the child. The father told him that in Syria it was not very uncommon for children to be born with quite long hair on the entire body and especially down the spine. But it did not occur in them unless so born. The speaker thought it pretty certain that the case was not congenital. There were frequent cases of overgrowth of hair following nerve injury, neuritis, etc., and he thought it reasonable to attribute this case to the illness—at least there was some causative relation, for the growth immediately followed the illness, and it all came out in the course of six or eight weeks.

DR. JULIUS KOHL read a paper upon

Strangulated Hernia, Complicated with Retained Testicle and Intra-Abdominal Hydrocele of the Cord.*

DISCUSSION.

DR. A. H. MEISENBACH said he was a little at a loss to understand both the condition as regards the sac wall and the fluid contained in the cyst. As he understood it, Dr. Kohl, in making the incision to the parts involved, came down on the sac and then punctured the sac with hypodermic needle so that the fluid was in the hernial sac proper and pushing forward the sac irrespective of the contained hernia and of the encysted cord itself. He thought it peculiar that there should be such a gangrenous condition.

DR. KOHL said he thought this had been produced by taxis.

DR. MEISENBACH asked if the sac was involved.

DR. KOHL said it was: it was in a condition to break down, though it was not complete gangrene but a very severe ecchymosed condition.

*See page 222, this number.

DR. MEISENBACH said that with this pathologic condition he agreed with the essayist that unreasonable taxis had probably been used. For a long time he said he had followed the practice of trying by gentle means to reduce the hernia and when this failed he did not wait but suggested an operation, because there is less danger when the tissues are uninjured than after ruthless taxis have been tried in order to reduce. Retention of the testicle in any case he said, might be followed by a grave condition, as it might give rise to an inflammatory condition around the testicle. He believed with the Doctor, that the retained testicle was the guide which led the bowel into the inguinal canal. On the question of drainage he took a decided issue with the essayist. He appreciated fully, he said, the reason why the Doctor drained as he did, but he was extremely fortunate not to get an extension of the pathologic process into the peritoneal cavity itself. The drainage was not along the margin but extended up quite a distance, and thus might carry bacteria. He thought gauze drainage better in these cases.

DR. KOHL, in closing, said he felt great hesitancy, but the tumor was there, and he did not believe that he could go far wrong in aspirating before enlarging the opening. The puncture was made in a direction, that if the bowel was near the needle would not strike it; and by using a very small needle he did not think that harm could be done. The puncture was made for diagnostic purposes only, and as soon as the fluid was demonstrated he did not hesitate any longer. He agreed with Dr. Meisenbach in regard to taxis in reducing hernia, and thought it ought not be carried beyond a certain point. He believed that in eight cases out of ten, the surgeon ought to be able to reduce the tumor by taxis, if called early; but taxis should not be kept up too long, especially since in these days of perfect antiseptic methods, there is little danger in opening the abdominal cavity. In ligating he said that he did not include any nerve tissue; he simply cut the cord and ligated the vessels.

The over-crowding of the nursing professon is receiving extended comment. It is stated that already not more than half of the time of trained nurses in our large cities is employed. Like the graduate in medicine, the trained nurse is apt to settle in a large city, usually not far from the training school, and consequently her opportunities are not great. This tendency causes the profession to neglect a valuable field which is to be found in the country. In the smaller towns, and often in the rural districts, are abundant opportunities for the work of the trained nurse. Necessarily, the country nurse cannot expect the twenty or twenty-five dollars a week that the nurse in the city receives; but it is to be remembered that the cost of living is very much less in the country.

Current Medical Literature

DISEASES OF CHILDREN.

Infantile Gonorrhea.—W. B. STEWART* reports the occurrence of gonorrhea in a girl of 4 years. The child gave a full explanation of contact with a young boy, who had the same disease. Both children were colored. The case responded readily to vaginal injections of potassium permanganate.

Clinical Report of an Epidemic of Infantile Diarrhea.—I. J. JONES.† For clinical purposes it is only necessary to distinguish between two forms of infantile diarrhea, the dyspeptic and bacterial. Cases of the former type readily get well if the diet is corrected. If, however, by careless feeding the intestinal tract is infected by any of the many forms of bacteria capable of producing infantile diarrhea, serious consequences at once ensue. Therefore in feeding the greatest care should be observed to see that all possible sources of bacterial infection are excluded. The epidemic referred to was due to failure to observe and properly carry out this condition. To obtain the greatest certainty that the food is sterile until it reaches the stomach of the patient, the nourishment should always be prepared with hot water, first boiled and allowed to cool to the required temperature. It should never be prepared in quantities. Foods which require milk in their preparation were not to be thought of under the conditions existing, as the milk was infected and difficult to sterilize. Lactosomatose was used and gave very good results. The conclusions reached after its use in twenty-five cases are: It is readily prepared in hot water. It forms an agreeable addition to other liquid food. It is palatable and is taken with increasing relish. It is not an irritant to the intestines, but, on account of the combination with tannic acid, assists materially in the treatment of diarrhea. It is aseptic, and, on account of the method of preparation, not liable to be infected. It contains all the albuminous principles necessary to nutrition, and with slight and judicious additions will support life in all the functions for an indefinite length of time.

EYE, EAR, NOSE AND THROAT.

Prognosis of Laryngeal Tuberculosis.—R. LEVY‡ calls a case of laryngeal tuberculosis cured in which all indications of disease fail to recur after two, or, in some instances, after one year from their cessation. Many a case may be considered cured which, in later years, because of continued pulmonary disease, either through local infection of the lymph or blood channels, develops another and new case of

*Phila. Med. Jour., September 16, 1899.
†N. Y. Med. Jour., September 16, 1899.
‡Jour. Am. M. A., Sept. 16, 1899.

laryngeal involvement. The progress and termination of the cases are largely influenced by the nature and position of the lesion, the combinations of lesions, the pulmonary complications, the coexistence of syphilis, and the treatment. A favorable view may be accorded the infiltrative and papilomatous variety of the lesion over the ulcerative by 39 per cent. Cases in which the epiglottis or any epiglottic folds were involved, were found to be 60 per cent. more fatal. The rapidity, extent, length of time, stage and nature of the lung involvement must have very close bearing on the laryngeal complication. Great care and skill should be exercised in the application of heroic measures. Properly chosen surgical or medical treatment may greatly influence the prognosis.

Epileptic Eye-Strain.—C. M. CAPPS* reports two cases as follows: A girl, 9 years old, came under observation one year ago; had had epileptic convulsions since 4 years of age; would have from three to six convulsions every month; was put to school at 8 years of age, when the convulsions became rapidly worse. The pupil was dilated with atropine; the convulsions stopped. Patient had compound myopic astigmatism, for which glasses were prescribed. There has been no return of the epilepsy. The second case was a girl of 8 years of age, epileptic since she was 3 years old. This was a case of compound hypermetropic astigmatism. Her glasses were prescribed five months before and there has been no return of the epilepsy. In cases reported where good results were obtained from the administration of belladonna, the effect lasted only while the systemic effect of the drug was produced and passed off soon after the remedy was discontinued. It is probable that the good results in these cases were due only to the power of belladonna to dilate the pupil and the improvement ceased as soon as this effect passed off.

Treatment of Chronic Croup.—E. ROSENTHAL† has found in a number of cases of diphtheria that the persistence or return of symptoms after the disappearance of the Klebs-Loeffler bacilli was due to the presence of the streptococcus pyogenes, and that the symptoms of chronicity may be ascribed to it. The cases resulted in perfect cure after the administration of antistreptococcic serum. The treatment is as follows: When called to a case of croup, whether it requires inhalation or not, antitoxin should at once be used. If, upon bacteriologic examination, streptococci are found to be present, an injection of antistreptococcic serum is given, and the antitoxin continued as the case may require. If there is a negative result as regards the diphtheria, and a positive result as regards the streptococci, the antitoxin should be stopped, and treatment continued with antistreptococcic serum alone. The method of its use is similar to the antitoxin, with the exception that of the serum a large initial dose is given, and the same or a smaller dose follows, and the early morning is the best time for its administration. The duration of treatment is the same as with the antitoxin, and on the third day evidence of a cure may be noted. The serum can be used to any quantity, and is as free from danger as is the antitoxin. The commencing dose is 10 cc., or even a larger quantity, and this is repeated on the same day, or the following day, and is continued till its influence is shown by an amelioration of all symptoms.

*N. Y. Med. Jour., Sept. 16, 1899.
†Jour. Am. M. A., Sept. 16, 1899.

Hysterical Blindness.—A. T. MUZZY.* Hysteria affecting the eyes is not very frequent; the cases reported occurred in patients usually from 20 to 50 years of age, and among males in about the same propertion that holds good in hysteria with the other and more customary manifestations. The loss of sight is complete, and is almost always on one side. The pupil reacts promptly when the sound eye is covered. The ophthalmoscopic picture is normal. Many patients have achromatopsia, or dyschromatopsia, and hemianopsia besides. The onset is usually sudden, and there is anesthesia of the conjunctiva and cornea. Very often the blindness is complete at once. As the vision returns, it may come at the center of the field or as a contracted field, with a scotoma or blind section near the center. Sudden dimness may come on first, and this deepens more or less rapidly to complete loss. During testing by lenses, ophthalmoscope and perimeter, the vision varies, growing worse from the low nervous vitality of the patient, often being accompanied by photophobia and profuse lachrymation. An unusual association of symptoms, with great variations in the symptoms in any eye case, is a strong argument for hysteria. The prognosis in all forms is good, though the condition may exist for months, and even years.

Multiple Sinus Disease Following Influenza.—BOLL.† A woman, aged fifty-eight, had a sharp attack of grip, with high fever, but without pulmonary or abdominal complications. At the end of the second week she complained of a constant dull pain in the right cheek. It was at first thought due to her teeth, but in a short time a conjunctival chemosis appeared, and she was referred to the writer. Abscess of antrum was recognized and operated upon. Ostium maxillare in the nose was enlarged, antrum curetted, and a drainage tube inserted. Four days later pus began to drop from the nose, and an examination revealed an empyema of the ethmoid. This was readily overcome, but constant dull frontal headache was complained of, and the ocular conjunctiva remained congested. These symptoms were convin-

*N. Y. Med. Jour., Sept. 16, 1899.
†Med. Rec., Sept. 2, 1899.

cing for an involvement of the frontal sinus. The usual operation was performed, and an excellent result obtained. In about four weeks after the frontal operation she complained of pain in the right ear. This was readily followed by a rupture of the membrana tympani, and a discharge of blood and pus. A surgeon was called, recognized disease of the mastoid, and operated at once. Patient recovered rapidly from this operation, and remained in good health for nearly two months, when she contracted pneumonia and died.

Glaucoma Following Supraorbital Neuralgia of Malarial Origin.—L. A. Bize* reports a case in which glaucoma was diagnosed, though the intense pain was entirely out of proportion to the increased tension and other symptoms. Improvement followed routine treatment. The following afternoon the condition recurred, but only partial relief was obtained from treatment. The attacks continued at irregular intervals for several days and at no time was the tension greater than +1. About the seventh day the attacks began to appear at the same hour every night, when the administration of quinine was begun in large doses. The first night following this treatment the attack was delayed two hours. and the next day did not recur. The patient improved daily and was practically cured in ten days.

Ear Wax.—W. B. Stewart.† Half-strength solution of hydrogen dioxid will disintegrate the hardest plugs of wax in the ear in 5 or 10 minutes, and they can then be removed with very little syringing. It does not cause inflammation or irritation. The ear should be wiped dry with absorbent cotton and petrolatum applied. A plug of cotton is worn for one day.

GYNECOLOGY AND OBSTETRICS.

Malignancy in the Female Genito-urinary System.—L. G. Baldwin‡ gives a short review of some cases coming under his care, with some deductions therefrom. Out of 3,787 consecutive patients, 60 were found to be suffering from some form of malignant disease of the genito-urinary organs exclusive of the breasts, or a total of 1½ per cent. of all gynecologic cases. Of this number the disease was located in the uterus in 55 cases. Of these, hysterectomy was performed in 17 cases, of whom 4 are well two or three years after operation. The fact most pointedly brought out is that the prognosis in malignant disease of the genito-urinary organs is very bad, and the fault lies with the family physician and the patients themselves rather than with the treatment. In nearly all cases from six months to two years had elapsed before they came under notice. The occurrence of hemorrhage should excite suspicion, no matter what the age or condition of the patient, and should not be regarded as an indication of the menopause; it is a symptom that should always be investigated with all possible care and promptness. Pain is not a prominent symptom in cancer of the uterus until the disease has extended beyond the organ itself, so that as a diagnostic symptom it is valueless. Loss of flesh and cachexia also, like pain, occur late in the disease. A thin watery discharge from a vagina in some cases precedes a hemorrhage and should excite suspicion. The continuance of the menstrual function to or beyond the age of 50 is liable to indicate the presence either of cancer or a fibroid. A small proportion of cases have no sign or symptom upon which a diagnosis can be made until the disease has advanced beyond all possibility of even temporary relief. As to treatment, the early and complete removal is the only hope of non-recurrence.

Cure of a Vesico-Vaginal Fistula Through a "Sectio Alta."—Dr. Maiss* recounts the history of a case in which a fistula was caused by a wooden ring being allowed to remain undisturbed in the vagina for fifteen years. At the operation the inner end of the fistula was isolated, working within the bladder, and the healthy tissue edges united over the opening. For three weeks a little urine escaped through the vagina, but after that time the patient was completely cured. A median hernia was the consequence of her not adhering to instructions to the extent of wearing a supporting bandage.

Treatment of Endometritis by Drainage and Irrigation.—A. H. Goelet.† Endometritis is not so common as is generally supposed, and hyperemia of the endometrium is often mistaken for it. Another condition often mistaken for endometritis is so-called cervical catarrh, in which the diseased process does not extend beyond the internal os. The condition is usually an infection of the tubular glands of the mucosa of the cervix, and manifests itself by a discharge in which may be found staphylococci, streptococci, or gonococci. In such a condition the cavity of the uterus above should not be invaded even for the purpose of diagnosis until all evidence of germ growth, as revealed by the microscope, has been effaced. The most rational method of treatment is to stimulate the glands to throw off the pent-up secretion and to irrigate the surface frequently with a non-astringent, non-irritating solution to remove the secretion and prevent migration. The same holds true of inflammation involving the mucous membrane of the cavity of the uterus. Astringents and caustics defeat drainage rather than favor it. The dull curette should be used only to remove projecting granulations or superfluous tissue which may be blocking the orifices of the glands and preventing

*N. Y. Med. Jour., Sept. 16, 1899.
†Phila. Med. Jour., September 16, 1899.
‡Phila. Med. Jour., Sept. 16, 1899.

*Centralblatt für Gynäkologie, September 2, 1899.
†Jour. Amer. Med. Assn., September 16, 1899.

drainage. Evacuation and drainage of the glands must be maintained and frequent irrigations with a non-astringent, non-irritating solution, though a return flow irrigator must be employed until no vestige of disease remains. Inspection of the endometrium by means of the uterine endoscope is regarded as an essential prerequisite for successful treatment, together with microscopic examination of the discharge.

HYGIENE AND BACTERIOLOGY.

Condensation and Preservation of Milk by Refrigeration.—H. O. MARCY* refers to the process, described some time ago, by which 80 per cent. of the water is abstracted from milk by freezing it, when in moderate agitation. It has been shown that the expense of condensation is very much less than by evaporation in vacuo and that the resultant product is of much greater value. It was found that the bacteria were in a large measure destroyed and that the concentrate put up in glass jars, such as are commonly used in the distribution of milk, has a keeping quality of weeks rather than days. It is believed that this process offers a practical solution of the difficult and expensive problem of milk distribution in cities; that the family supply will be furnished in a concentrate one-fifth the bulk of ordinary milk, and that distribution of it from house to house, made once a week, will be ample for practical purposes. Fat globules are uninjured and the cream unimpaired for table use. Pathologic bacteria are destroyed and the milk-supply will be rendered safe for use.

Thread-formation.—H. KRAUS† concludes from his experiments, which were made to verify Pfaundler's assertions: 1. Thread-formation is a phenomenon seen in certain bacteria under the influence of an agglutinating serum. 2. Thread-formation is always preceded by agglutination. 3. Thread-formation is not as constant a phenomenon as agglutination. 4. On the whole, the rules established for the practical utilization of the agglutination hold good, too, for the thread-formation, with the exception of bacterium coli commune. The coli-serum acts in an agglutinatory or thread-forming way only on that particular case of bacterium coli which has produced the immune serum.

Contagion, Infection; Are They Synonomous?—T. A. GRIGG‡ reviews the various definitions and classifications used by numerous writers in the use of these terms. From his own standpoint, an infectious disease is produced by a pathogenic micro-organism that lives and propagates in a suitable soil on the outside and independent of man, but when taken into the system and absorbed is capable of producing certain diseased conditions which are not directly transmissible from patient to host; while a contagious disease is produced by a pathogenic micro-organism that propagates in the afflicted patient, and which, after escaping from said patient without undergoing further change, and on being taken into the system of a prospective host and being absorbed, is capable of producing certain diseased conditions, and is transmissible from patient to host, either directly by contact, or indirectly, as by fomites.

The Influence of the Lymph-Glands on the Establishment of Immunity Against Infectious Diseases.—MANFREDI and DIOLA* injected very small amounts of highly virulent anthrax-bacilli in the anterior chamber of the eyes of guinea pigs. Very soon afterwards they found the bacilli in the cervical glands, and later in the other subcutaneous glands; the germs perish, however, here without making the animal sick. Larger doses cause death of the animals only after 3 to 4 days. The introduction, therefore, of a small number of germs into the lymph-streams results in a retardation of their development (perhaps in an attentuation) and in their death. In this way an immunization from anthrax is achieved, which is not to be obtained by other methods. Of typhoid bacilli a great number is tolerated, when introduced through the anterior chamber; here, too, immunity is established. In this way it takes double the usual subcutaneous dose of diphtheria toxin to cause death.

What Are Antitoxins?—R. G. ECCLES.† The theory which seems at present to permit of the generalization of the largest number of facts is the one which assumes that the antitoxic and bactericidal power of serum is lodged in substances that are of the nature of enzymes. Enzymes are substances that have the power of causing other organic substances to alter their chemical composition by their presence, while they themselves remain unchanged. Those that we know best, such as pepsin, ptyalin, trypsin and invertin, all force water into the chemical composition of various food stuffs; they probably split all the substances they act on into smaller molecules. Enzymes may render various substances soluble or insoluble in the substance of the cell. By acting on toxins and other organic poisons with the special enzymes of the different kinds of tissues so as to alter their structures and make them unable to penetrate such tissues, they would at once be rendered harmless. Immunity is due to an increase in the production of the fixing enzyme of that tissue which happens to be the special point of attack of the poison, this increase being due to the irritation of the tissue elements that the poison seeks to damage. After the cell has been irritated for a considerable

*Jour. Amer. Med. Assn., September 16, 1899.
†Wiener klinische Wochenschrift, 1899, No 29.
‡Phila. Med. Jour., Sept. 16, 1899.

*Zeitschr. für Hygiene u. Infections Krankheiten, Vol. 30, No. 1.
†Jour. Amer. Med. Assn., September 16, 1899.

time, it gets into the habit of producing an excess, thus establishing continuous immunity. As an overproduction of gastric juice will cause intense hunger, so an overproduction of other enzymes would be expected to produce their form of hunger, *i. e.*, a desire for the poison that caused them to be produced in excess. This is actually the case in the morphin hunger of morphin fiends and the nicotin hunger of the tobacco user.

INTERNAL MEDICINE.

Seasickness.—J. C. DE VRIES* describes seasickness as a peculiar functional disturbance of the nervous system, produced by shock resulting from motion of the ship. It is clearly a functional disease of the central nervous system and not of the stomach or alimentary canal. It may be divided into four stages: Depression, exhaustion, reaction and convalescence. Children and the very aged rarely suffer from it. It is most frequently seen in those of highly sensitive and nervous temperament. It can rarely be mistaken for any other affection, although it may simulate gastro-enteritis at first. An active purge, either Epsom or Rochelle salts, should be taken the night previous to embarkation, followed by 20 grains of bromide of sodium at 7 A. M. the day of sailing, and this dose repeated one hour before the vessel sails. Remain on deck constantly save for meals and bed. Vichy and Apollinaris should be taken freely throughout the voyage. The horizontal position proves more agreeable, as it supports the stomach and other viscera. Cold food should be avoided.

Our Tubercular Patients; Whom to Send and Where to Send Them.—J. F. MCCONNELL† sums up his ideas as follows: Properly selected climatic treatment gives great aid toward permanent arrest, i. e., cure, of the tubercular process. Delay in affording patients such an opportunity is criminal. Early cases tend to recover, but late cases should be kept at home. The climate of Southern New Mexico is particularly adapted to early cases, and the majority of well-selected, early tubercular subjects will improve and be quickly restored to health in that region of almost cloudless skies, with warm, genial winter days, absence of rain and snow, and accommodations suitable to all requirements.

Contribution to the Knowledge of the Spread of Tuberculous Virus Within the Human Organism.—The case described by J. CABRILOWISCH‡ illustrates the difficulty of the problem in regard to the distribution of the tubercular toxin in the body. The laws governing the invasion of the organs by the tubercle bacilli are as yet unknown. This case is that of a perfectly normal man, who in the course of eight months was attacked by a wandering tuberculosis. The process began first in the right apex: after four months the right lung was almost completely sound again, only in the upper part of the lower lobe a slight dullness was demonstrable. The other symptoms pointing to a lung invasion also ceased—no cough, no temperature, no profuse sweating. Some days elapsed and the lungs showed nothing abnormal, but symptoms pointing to an abdominal affection soon showed themselves. An exploratory laparotomy showed the presence of a tuberculous peritonitis. In the end the patient died of a tuberculous peritonitis.

Atypical Forms of Pneumonia.—E. PALIER* treats the subject under the following heads: 1. Gastric pneumonia. 2. Cerebral pneumonia. 3. Wandering pneumonia. 4. Abortive pneumonia. 5. Chronic pneumonia. 6. Masked pneumonia. In the first variety the abdominal disturbances are sometimes so great as to lead to the belief that the main seat of disease is in the abdomen. A case is cited in which the patient was operated upon for peritonitis due to appendicitis, neither of which existed; autopsy revealed the presence of empyema complicating the pneumonia. Of the cerebral type, a case is reported in which the symptoms so closely resembled those of tubercular meningitis that it could easily be mistaken for it; the patient, a boy 2 years old, recovered. The meningitis complicating pneumonia is considered to be non-tubercular, and there seems to be no relationship between pneumonia and tubercular meningitis. Of the wandering pneumonia, two cases are described, in both of which the pneumonic process appeared in the second lung after it had apparently been resolved in the first. The process may, however, involve a second lobe of the same lung before resolution has taken place in the primarily affected lobe. Under the title of abortive pneumonia, cases are referred to which last only a few days, terminating in recovery, and in which the physical signs do not plainly manifest themselves. By chronic pneumonia is meant that variety of both croupous and catarrhal pneumonia which are subacute from the outset and last for months and sometimes for years, terminating very frequently in recovery. These cases closely resemble pulmonary tuberculosis, with which they are frequently confounded by physicians.

Floating Liver and Its Clinical Significance.—M. EINHORN† defines this as a liver which has fallen downward, and can usually be restored to its normal position, partially or wholly, by certain manipulations. Its etiology has not been entirely elucidated, but it has been ascribed to tight lacing, frequent pregnancies, lacerations of the ligamentous structures of the liver through acute or repeated trauma, and to an enlargement of the abdominal capacity

*N. Y. Med. Jour., Sept. 16, 1899.
†Jour. Am. Med. Asso., Sept. 16, 1899.
‡Berl. klin. Woch., September, 1899.

*N. Y. Med. Jour., Sept. 16, 1899.
†N. Y. Med. Rec., Sept. 16, 1899.

from progressive emaciation, or after childbirth, or removal of abdominal tumors. Of 804 patients carefully examined 30 were cases of floating liver, 21 women and 9 men. In the female patients movable kidney coexisted in about one-half of all the cases of floating liver. The cases can be divided into five groups. 1. Cases unaccompanied by symptoms. 2. Dyspeptic cases, with indefinite digestive disturbances, with weakness and other nervous symptoms. 3. Cases of hepatalgia, the pains radiating from the right side of the abdomen toward the back and shoulder-blades. 4. Cases of hepatic colic; no icterus is commonly present, but it may appear in rare instances. 5. Asthmatic cases in which a feeling of fullness and constriction is especially prominent. Cases are cited illustrating each of these groups. Diagnosis is based on the demonstration of the fact that the liver has left its normal limits and has been displaced forward and downward. Percussion and palpation should he carried out, both in the recumbent and upright posture. Inspection in the same cases shows a prominence either of the entire upper abdominal region or upon the right side. Mere enlargement of the liver, the presence of other tumors, floating kidney or mere displacement of the liver by filling up of the thoracic cavity, must be differentiated. The treatment resembles, on the whole, that of enteroptosis, and especially that of floating kidney. Recognition of this condition is important, since otherwise errors in diagnosis may be detrimental.

NERVOUS AND MENTAL DISEASES.

On the Question of the Crossing of the Root of the Facial Nerve.—A. BARY* makes a contribution to the question, whether the cranial nerves spring from one half of the brain, or whether, in part at least, they have a crossed origin. The brain of a man who, when alive, had a typical peripheral facial paralysis, was examined with this end in view. The brain was examined by the Marchi method. The following fibres were found to be degenerated: 1. The nerve bundle which sprang from the right facial nucleus. 2. The knee of the facial root, which in cross-section appears as the oval field. 3. The right descending facial root. 4. The branch described by Obersteiner, which extends to the raphè, which can be followed to the other side. 5. The knee of the left facial root. 6. The nerve fibres which go out of the left facial nucleus. The following conclusion then is reached: The greater part of the facial root springs from the nucleus of the same side. A smaller part, however, has its origin from the facial nucleus of the opposite side, goes to the knee of the facial root, and crosses in the raphè and eventually unites in the knee of the same side with the greater portion of the fibres of the facial.

*Neurologische Centralblatt, Sept. 1, 1899.

A Case of Basedow's Disease, With Psychic Symptoms, Due to the Ingestion of an Excess of Thyroid Extract.—E. BOYNET* describes a case of artificially-produced Basedow's disease. The patient, 24 years old, was being treated for a generalized dermatitis exfoliativa by means of the thyroid gland of a sheep. One gland a day was the prescribed dose. Unknown to the physician the dose was increased to ten a day, and kept up for ten days. Shortly after he was attacked by a variety of acute mania, characterized by great restlessness and excitement. After four or five days the attack subsided. Tremor of the hands, and an enlargement of the thyroid and exopthalmos still persisted. These symptoms gradually disappeared with the cessation of the thyroid feeding.

Concerning "Automatic Ambulation" ("Fugues," "Dromomanea.") — L. E. BREGMAN† describes a case of this interesting and little-understood affection. A fourteen-year-old boy, morally and mentally, normally developed, wanders away periodically from his home. There is no cause for this, as he is well taken care of and well treated. These periods of wandering began in his seventh year. These attacks are characterized by the following peculiarities: 1. They occur independent of the patient's will. "Something undetermined presses him forward." His will attempts to withstand this, but soon grows weakened. 2. Although in the beginning no definite idea for the wandering is present, later there is always the thought of his dead brother and a desire to see him. 3. The patient has never done anything in these attacks out of the way, or criminal. 4. The recollection of the experiences during these wanderings remains, on the whole, preserved, but there are always gaps in his experiences which are filled out by his imagination. Charcot regarded these cases as a form of epilepsy. Other authors see a connection between "Automatisme Ambulatoire" and hysteria. Raymond has classed those cases in which more or less recollection of the events during the attack remains, as "Fugues des Dégenérés ou Psychiasthéniques." This case is classed by the author as belonging to this category.

Nervous Hemorrhages; A Contribution to Their Study.—S. W. S. TOMS‡ reports a case of this rare affection; the interesting features lie in the following: 1. Heredity—neuropathic and tuberculous. 2. Nervous shock caused by father's tragic death. 3. Nervous shock accompanied by severe traumatism to his head from a personal attack upon himself and a companion in young manhood. 4. The existence of stigmata of hysteria, sensory, auditory, visual, at all times during these attacks, and which were not accom

*Revue Neurologique, Aug. 15, 1899.
†Neurologische Centralblatt, Sept. 1, 1899.
‡Phila. Med. Jour., Sept. 16, 1899.

panied by the usual symptoms of visceral hemorrhage. 5. The mental and physical states of the patient were predisposing conditions. 6. Persistence of the main symptoms—the regular crises—but mixed in type at some attacks; epigastric and cephalic aura with precordial pain and throbbing of the temples, with regularity of the phenomena in the hysterical paroxysm. 7. The method of the patient in inducing the attacks for purposes of personal effect—the purposive acts of getting into a safe place, so that he might not be injured by falling. The onset of attacks always occurring in secret, and the absence of epileptic symptoms with reflexes intact, and other classic conditions of spinal-cord lesions wanting, make a differential and positive diagnosis of the hysterical condition of the patient. 8. Hemorrhages have always been from mucous membranes; were always of bright red blood, clotting normally, never frothy or mixed with contents of the stomach. They have apparently come from the mucous membranes of the mouth, throat, stomach and ears, never from bladder or rectum. 9. Physical examinations were always negative, as was also urinalysis.

Concerning the Imagination Reflex of the Pupils of the Blind.—J. PILTZ* continues his investigation in regard to the imagination reflex of the pupils in cases of blind individuals. The conclusions arrived at are as follows: 1. The pupils of the blind which by side illumination do not react to the light react to central (axial) illumination. From this follows: (*a*) that the pupillary fibres are found principally in the macula lutea and its neighborhood; (*b*) that the pupillary fibres can remain undisturbed in those who are totally blind, whose optic fibres have been totally degenerated for a long time. 2. The pupils of the blind become narrowed when the thought of light takes place (even after atrophy of the retina). 3. The pupils of the blind become wider when the idea of a dark object is in the patient's mind (even when the retina is atrophied).

A Case of Tubercle of the Medulla.—C. LEVADITI.† This report by Levaditi illustrates the difficulty of diagnosis in brain tumors, and shows how often the location of the tumor bears no relation to the symptoms produced. The case in point is that of a man aged 33 years, with advanced tubercular affection of the lungs. Violent pains in the head were the first symptoms. After an attack of Jacksonian epilepsy the patient became hemiplegic on the right side, with rotation towards the left. The face was paralyzed on the right also. Shortly after this death took place, under symptoms of cyanosis and dyspnea. At the level of the quadrigeminal bodies posterior, a greyish tumor was found, circular in form, regular, and about the size of a pea. Microscopically it showed a tuberculous nodule, or solitary tubercle, the center of which was in a state of caseation. Immediately the discordance between the symptoms and the site of the lesion was noted. The pyramidal tract on the left side was absolutely intact. The effect of the toxins originated by the bacilli in the tubercular nodule might explain the general cephalic symptoms, but could not explain the hemiplegia. A study of the ascending degeneration perhaps offers an explanation. The superior cerebellar peduncle showed an evident reduction in the fibres at the level of the tubercular nodule.

The Treatment of Severe Cases of Neurasthenia; Sperminum Poehl.—M. SALOMON* gives his experiences with this form of organo-therapy. It is of use in (1) conditions of inanition; (2) metabolic anomalies, as diabetes, uric acid diathesis; (3) diseases of the nervous system; (4) diseases of the heart. The present paper deals with two cases of severe neurasthenia, which reacted very favorably to the sperminum injections in a 2 per cent. sterile solution. The author does not think that suggestion had anything to do with the result. More experience, however, is needed before any definite idea of the therapeutic value of sperminum can be obtained.

A Contribution to the Theory of the Changes in the Nervous System in Concussion.—This paper, by A. D. KAZOWSKY,† is an experimental study of the pathologic appearances of the nervous system accompanying concussion of the brain. The experiments were as follows: Five rabbits were struck with a small hammer on the forehead; the blows were heavy and were given until the animal fell. Death followed, as a rule, in about one-half hour. In another group the rabbits were struck less strongly, until they were rendered unconscious; this procedure was repeated for five days and then the animals were killed by cutting the carotids. The brains and cords were examined, mainly by means of the Marchi method. A summary of the results is the following: In the first group, the changes were concentrated in the medulla and the upper part of the cord. These changes consisted in degenerative appearances of the myelin sheaths and in small capillary hemorrhages. No relation between the two could be established. In the second group analagous results were found, except that hemorrhages were not present and the degeneration was much more intense. It must be assumed, then, that the degeneration in group 2 is an expression of the total effect of all the blows, which were repeated daily. The conclusion was also reached that the effect of a trauma does not limit itself strictly to the region of its application. Evidently we have to deal with some especial mechanic law to explain the changes found in the medulla. The author coin-

*Neurologische Centralblatt, Aug. 15, 1899.
†Revue Neurologique, Aug. 30, 1899.

*Berl. klin. Woch., Aug. 21, 1899.
†Neurol. Centralblatt, Sept. 1, 1899.

cides with Westphal's opinion, that the medulla reacts with great ease to any circulatory disturbance and forms the locus minoris resistentiæ in every mechanic injury to the brain.

PATHOLOGY AND HISTOLOGY.

Facts and Fallacies in Urinalysis.—T. W. SCHAEFER.* The boiling test for albumin is an unreliable as well as unscientific procedure and should not be depended upon at all. It should be principally used to differentiate samples of turbid urine, the turbidity being due to an excess of urates or phosphates. On slightly warming an albuminous urine, rendered turbid by the presence of urates, the latter are dissolved and the urine becomes clear. If the urine be turbid, it should first be filtered and then tested for albumin with nitric acid, picric acid, acetic acid or ferrocyanide of potassium, which are simple and reliable tests. As to phosphates in the urine, their clinical significance is still doubtful, and an estimation of their total amount will not benefit the patient. The uric acid theory, as the cause of so many diseases, is not favored. The quantity in the urine should never be presumed to be excessive from the mere fact of deposit of uric acid crystals in the urine upon cooling, as this may occur when the uric acid is both relatively and absolutely deficient. Brick-dust sediments are of little diagnostic value; they are frequently observed during the winter months and less often in summer, although an increased amount may be present, being held in solution by the higher temperature. It is doubtful whether uric acid has actually any causal connection with the varied manifestations pictured under the name of uric acid diathesis, particularly in gout. An increase of uric acid in the blood of these patients has never been established with any degree of certainty. The sources of error in the use of Fehling's solution are pointed out. In examining for it is essential to differentiate between true casts, pseudo-casts and cylindroids; only the first are of diagnostic value. Other points in the microscopic examination are dwelt upon, and the fact noted, that the Ehrlich diazo-reaction for typhoid fever cannot be regarded as pathognomonic of this disease; it has been obtained in healthy urines.

SURGERY.

On the So-Called Early Operation in Appendicitis Purulenta or Gangrenosa.—RIEDEL† believes strongly in the early operation in appendicitis. His statistics show that about 50 per cent. of all cases belong to the purulent or gangrenous variety, while the rest are the simple catarrhal appendicitis, which are susceptible to purely medical treatment. The non-purulent form runs its course under relatively mild symptoms; often pain alone is present, with perhaps some vomiting; the pulse is slow and strong. There may or may not be a palpable tumor. As soon, however, as the fever reaches 38.5° C. and the pulse 100, operation is at once indicated. From 12 to 24 hours after the appearance of the first symptoms, a gangrenous condition of the appendix may exist. A tumor that has arisen acutely, with symptoms of fever and high pulse, is an indication, according to Riedel, for immediate operation. The immediate operation has the following advantages: 1. The abdominal incision can be made small, because only a small tumor must be removed. 2. All the organs can be easily recognized. One can easily find the junction of the ileum with the cecum; the same with the appendix. 3. The appendix is still loosely adherent to its surroundings. It is easy to separate these adhesions and to remove the appendix. 4. The pus already formed is still small in quantity, so that the small abscess can be easily emptied and cleaned. 5. The wound in the abdominal wall can be completely closed by means of a double catgut ligature. A hernia seldom follows. 6. The whole operation is exceptionally easy and simple. From this it follows that a patient with purulent appendicitis should be operated upon as soon as possible, similar to a patient with incarcerated hernia. Riedel then describes in detail the operation as performed by himself. He concludes the article by a consideration of the recurring form of appendicitis. There is nothing special in this form to differentiate it from the others. If, however, there should occur a new attack of an old purulent appendicitis, then this should be treated in the same way as an original purulent attack. The article closes with a plea for the better understanding of the operation, so that there need be no fear on the part of the surgeon to perform it.

Non-Malignant Strictures of Rectum.—J. B. BACON,* after briefly reviewing the former methods of treatment for this condition, concludes that they failed because of new fibrous tissue forming and reuniting the severed stricture bands, because of incontinence; because of the high death-rate; because of contraction of the lateral anastomosis opening. He has devised and advocated two operations: one for stricture, located at or above the junction of the levator ani muscles in the rectum, and one for that class of strictures located below the levator ani muscles. For a stricture of the first class, a laparotomy is made in the median line from pubis to umbilicus, with the patient in the Trendelenburg position. An anastomosis is established between the sigmoid and the rectum below the stricture, either by sutures or a small Murphy button. In doing this, two peritoneal surfaces are brought into apposition from the point

*N. Y. Med. Rec., September 16, 1899.

†Berl. klin. Wochenschrift, August 14 and 21, 1899.

*Jour. Am. Med. Asso., Sept. 16, 1899.

of anastomosis. The button will come away in about a week, leaving a small opening between the sigmoid and rectum below the stricture. It is then only necessary to clamp the whole or part of the septum from time to time until the stricture is severed. For that class of stricture located below the levator ani muscles, a mucous fistula, posterior to the stricture, is produced, so that when finally at a second operation the stricture is severed, this mucous tract lies between the severed ends of the stricture tissue, and prevents scar-tissue forming to reunite them and reform the stricture.

Epiphyseal Separation of the Ends of the Humerus.—M. LUCID,* after giving a brief description of the plan of development of the humerus, says that epiphyseal separation of the ends of the humerus belongs almost exclusively to the periods of youth and childhood, and is occasioned either by a direct blow or fall upon the shoulder, or by violent wrenching of the arm, as during delivery, while separation of the lower epiphysis is the result of a fall on the elbow, excessive adduction or abduction of the forearm with superextension, or a sudden or unexpected push of the arm, which it is unprepared to resist. The chief diagnostic signs of separation of the upper epiphysis from the humerous are: An abrupt projection to be seen and felt on the front of the shoulder, caused by the upper ends of the lower fragment; crepitus, when felt, is of a softer character than in fracture; the end of the shaft is rounded and smooth; the immediate recurrence of the deformity when the means employed for its reduction ceased to act. The most important practical point with reference to diagnosis is that the accident is apt to be followed by arrest of development, if not properly reduced. Treatment is given in detail, together with report of three cases.

On Primary Echinococcus of the Abdominal Retro-Peritoneum.—F. KAREWSKI† describes a case of this rare occurrence, calling attention to how large a proportion of echinococcus of the abdomen is found anteriorly. There is scarcely a case of the posterior form to be found in the literature of the subject. Two cases are described in which the original seat of the echinococcus was found in the retro-peritoneal tissue. Case 1. A woman, 35 years old, complained of severe pain in the left lumbar region. Over the left kidney was a tumor palpable, very painful and tender. The urine contained a small amount of pus and a trace of albumin, but not sufficient of either to justify a kidney affection. There was some temperature. Operation was resorted to and the left kidney laid bare. An echinococcus cyst was found which had developed from the retro-peritoneal tissue. The patient made a good recovery. In the second case, a large tumor involved the whole of the right side of the abdomen, extending to the liver. The symptoms were those of a general cachexia. A diagnosis of a large retro-peritoneal abscess was made, which had its origin from an echinococcus invasion, the situation of which was unclear. A puncture was made and the pus showed evidences of echinococcus. Operation showed the correctness of the diagnosis. The diagnosis of a primary retro-peritoneal echinococcus cyst is always difficult. The disease may exist for a long time in this locality without any especial symptoms. The position behind the large organs and surrounded by dense muscles and fascia is not favorable to a rapid growth. When a case presents itself with pain, which is intermittent and lasts a long time, localized more or less in the retro-peritoneal region, and which resists treatment and shows no tendency to involve other organs, then the possibility of a retro-peritoneal echinococcus cyst should be considered.

*N. Y. Med. Jour., Sept. 16, 1899.

†Berlin klin. Wochenschrift, August 14, 1899.

Gall-Stones; Observations on Their Treatment.—A. J. MCCOSH* discusses particularly cholelithiasis. Nine cases are reported where choledochotomy was done for stones impacted in the common duct. In six of these a thickened, contracted gall-bladder was found; in one a thickened but moderate-sized gall-bladder, and in two a thickened and distended gall-bladder containing pus. The main object of the paper is to advocate timely operative interference in cases of cholelithiasis; in the acute cases, to act before operative mortality has been raised from 1 to 50 per cent., on account of complications arising because of delay; in the chronic and relapsing cases, to prevent the patient from drifting into a life of semi-invalidism or the establishment of grave and oftentimes incurable liver disease; cholecystotomy is preferred to cholecystectomy or cholecystendesis. In 26 cases in which this has been done—exclusive of cancer—not a patient has been left with a permanent fistula.

Cases of Fracture of the Skull Followed by Recovery.—D. P. ALLEN† reports ten cases, all of which recovered, and the majority of them have been observed for several years after the receipt of the injury. There were five cases of fracture at the base of the skull, associated with paralysis of the facial nerve, loss of hearing and loss of smell. In part of the cases these injuries were permanent, while in others improvement has taken place. In one case the injury to the vault of the cranium was most extensive, so great as markedly to deform the skull. In another case there was considerable loss of brain-substance; there was a widely-gaping fracture through the supraorbital plate, so that the finger could follow it back to the optic commissure, and the patient did not lose consciousness. One patient, with a com-

*Jour. Am. Med. Asso., Sept. 16, 1899.

†Phila. Med. Jour., Sept. 16, 1899.

pound comminuted fracture, necessitating removal of a small portion of both tables of the skull, suffered from no disturbance which could be referred to the brain, and the sensorium was perfectly clear at all times.

The Improved Technique of the Amputation Which Leaves the Best Stump After Partial Removal of the Lower Leg. — PROF. BIER* acknowledges that the one weak point in his operation published in 1897 was the double amputation, which was thought indispensable to the production of his bone-flap. He has now, however, designed a saw, with its blade set in a highly-curved frame. The blade can be rotated in its linear axis and set firmly in the frame in several different positions. The operation, as modified by this instrument, is now done as follows: After incision through the soft parts Bier saws to the necessary depth into the tibia, and then, turning his blade into the line of the bone's axis, constructs the osseous flap, and then changing his direction once more saws off the tibia and fibula. He makes no other change in his original procedure.

A Severe Case of Traumatic Tetanus Successfully Treated with Serum.—FRASER.† Fifteen days from the date of injury the patient developed symptoms of tetanus. Within three days from this date the symptoms were fully developed and the case assumed a very virulent form. Injections of the anti-tetanic serum were begun now, 10 c.c. being given twice daily. After the fourth injection relaxation of the muscles began to take place and the patient made a gradual and permanent recovery. The injections were continued, however, for several days after the abatement of symptoms.

Gall-Stones; Consideration of Their Etiology, Diagnosis and Operative Treatment.—J. RANSOHOFF‡ submits the following propositions: 1. The gall-stones found in a gall-bladder are generally formed together; that is, about one and the same time. Their removal will not be followed by recurrence, unless a reinfection of the biliary ways occurs. 2. Cholecystotomy with drainage should be regarded as the normal operation. 3. Save in exceptional cases, the operation should be done at one time. 4. Ideal cholecystotomy or cholecystendesis is not to be recommended. 5. Cholecystectomy is rarely indicated in acute processes. It is more dangerous than cholecystotomy. Since most stones are formed in the gall-bladder, cholecystectomy is the more radical operation. It should be reserved for chronic cases in which a restitution of the gall-bladder to the normal cannot be expected. 6. Cysticotomy is a safe supplement to incision of the gall-bladder for stones of the cystic duct. 7. Choledochotomy, with suture and drainage, should be considered the routine procedure in common-duct stones. Incision of the duct, through the duodenum or from an incision in the loin (Tuffier), will rarely be needed. 8. Cholecystenterostomy has a limited but distinct field of application., i. e., obstructive jaundice from malignant disease or impermeable cicatricial common-duct stenosis.

*Centralblatt für Chirurgie, Sept. 2, 1899.
†Lancet, August 26, 1899.
‡Jour. Am. Med. Assn., Sept. 16, 1899.

Implantation of the Ureters in the Rectum.—J. KALABIN,* desiring to know whether or not he might attain the same results as had Moresten, in 24 operations, tried the implantation of both ureters in five dogs. All died in three to six days, three of them from peritonitis and two from uremia. In four dogs he operated on but one ureter; three of them died, but the fourth lived a month, and after being killed showed pathologic changes in none of its organs. The author did Mandl's operation on five dogs, with death as a result in every case. In four dogs he cut off a ureter; all died of peritonitis, and in two urine was found in the serous cavity. The above is of especial interest in connection with the surgery of abdominal and pelvic growths.

Constricting Adenoma of the Hepatic Flexure; Recovery after Extensive Resection of the Colon.—A patient of HOWARD LILIENTHAL† had lost flesh for two years, till a tumor mass could be felt in the right hypochondrium. Not being sure of the diagnosis, an operation was begun which terminated in the removal of the entire cecum and hepatic flexure. The extremities were united with a Murphy button, the two halves being of dissimilar size—a peculiar feature to say the least. In fifteen days the button passed with ease and the patient was soon able to leave the hospital. The tumor was found on microscopic examination to be a simple non-malignant adenoma. The channel in this growth, through which the feces had to pass, was extremely narrow and tortuous, so much so in fact that the author is surprised at the absence of all symptoms of occlusion.

Ethyl Bromide as an Anesthetic in Minor Surgery.—KEMFTER‡ recommends the use of ethyl bromide in those cases where short anesthesia is required. No bad effects have been observed in those cases where it was properly employed. Several cases are reported where death resulted; but in all of these the drug had been employed for prolonged anesthesia. One should always be careful to see that the drug is fresh and chemically pure. Lesions of the heart do not contraindicate its use. The best method of administration is to pour the full dose required to produce anesthesia into the inhaler, cover the patient's nose and mouth with the cone, and do not remove until there is complete narcosis. This requires, as a rule, one minute. The dose required

*Centralblatt für Gynäkalogie, September 2, 1899.
†International Journal of Surgery, September, 1899.
‡Maryland Med. Jour., Sept. 2, 1899.

in children varies from one to two and one-half drachms, and in adult stwo and three drachms. Statistics show a smaller death rate for ethyl bromide than for either chloroform or ether.

Surgical Anatomy of the Lymphatic Channels of the Upper Extremity.—BARTLETT* divides the lymphatics of the upper extremity into the usual superficial and deep groups, more attention being paid to the former than is commonly done in text-books on the subject. The palmar lymphatic net-work is drained by four sets of branches—interior, exterior, superior, and inferior, and in addition a large central trunk which anastomoses with the lymphatics of the thumb and index finger. Special attention is paid to the affections of the epitrochlear lymphatic node. This structure is involved only in case infectious material enters the superficial ulnar channels, but in case this takes place on the radial side of the arm and hand the above-mentioned node remains normal, while similar structures in the axillary space are primarily affected.

Ninety-Three Consecutive Abdominal Sections.—H. ROBB† reports briefly ninety-three cases without a death, calling attention to what are the most important factors upon which these favorable results depend. These are to be looked for in a careful operative technic and the proper care of the patient both before and after operation. The technic which was followed is briefly outlined, and some of the points in which difficulties were found are emphasized and the solutions of them given. A condensed clinical and pathologic report of the cases is also given, together with pathologic diagnosis from microscopic examination. The patients, with few exceptions, sat up in bed on the eighteenth day, and were out of bed on the twenty-first day. Average number of days in the hospital was 31.7. Pus was found at the time of operation macroscopically in 12 cases, microscopically in 25 cases. The total number of operations performed in the ninety-three cases was 288.

A New Handle and Grip for Scissors for Plastic and Other Delicate Work. — HOWARD KELLY‡ mentions a fault of the old-fashioned scissors, that both blades have a motion, so the incision becomes zig-zag, at the same time the operator's hand is in a cramped position, and inspection is interfered with. The instrument proposed has one long blade with a straight handle to rest in the palm; this branch receives one motion, and is bent so that the operator's field is not obscured by his hand. The other blade has a straight, short handle, to be manipulated by the index finger, while a spring insures what is known as "shearing," even though the lock may become loose.

*St. Louis Courier of Medicine, August, 1899.
†Phila. Med. Jour., Sept. 9, 1899.
‡Am. Jour. of Obstet., Aug., 1899.

Book Reviews

Saunders' Medical Hand Atlas. Atlas of External Diseases of the Eye. By Prof. Dr. O. HAAB, Zürich. Published by W. B. Saunders, 925 Walnut Street, Philadelphia, Pa. Price, $3.00.

This excellent little work, as its name indicates, concerns itself only with the diseases affecting the external organs of vision. Particularly noteworthy is the chapter on "The Examination of the Eye in Disease," in which the author shows how a scientific, systematic examination is a great help in arriving at a diagnosis. The plates sustain the reputation established by those of previous "Hand Atlases," which have made them of such great service to the practitioner. We can confidently recommend this work to those who desire a general, comprehensive grasp of the subject, without entering into details, which are more the part of the specialist.

The Mechanics of Surgery. By CHARLES TRUAX.

The above is in many respects a novel work. While published by an instrument manufacturer, it is by no means a catalogue alone; on the 1,024 pages appear 2,381 neat wood-cuts, which serve to illustrate most of the appliances used in modern surgery. Nor is this all, the accompanying descriptions, full as they all are, serve to guide the user in his choice of this or that particular contrivance as being applicable to the need at hand. The book is divided into chapters, and in each of these is considered all of the mechanical appliances belonging to it—Sterilization, Paracentesis, Amputations, Laparotomy, etc., as heads, group the instruments used under each.

The Newer Remedies. VIRGIL COBLENTZ, A.M., Pharm. M. Ph.D., Etc. P. Blakiston's Son & Co., Philadelphia; Lewis S. Matthews & Co., St. Louis.

The third edition of this publication comes as an absolute necessity to those who wish to keep in touch with the prevailing tendency of therapeutics and with the impulse which synthetic medication has given to treatment of diseases. In this work, of some hundred and fifty pages, all the newer preparations are set down in alphabetical order. Each preparation is described briefly, its chemical derivation is noted, and the dosage and general indication for its use are referred to. The great use of this book is that it gives the physician a working basis for his therapy with the newer drugs, and he does not have to rely upon the advertisements in the journals or the announcements sent to him for his knowledge in regard to them. The short addendum on organo-therapeutic preparations is a valuable part of this little book and will be much appreciated. The author deserves great praise for the care and patience which he has shown in the preparation of this book.

Practical Therapeutics.

The Sub-cutaneous Use of Quinin.—The chief objections to the use of quinin hypodermically have been the difficulty of effecting a perfect solution of the drug. If employed in an acid medium, the solution is neutralized as soon as injected by the alkaline juices of the tissues. The quinin is precipitated and is very slowly absorbed, probably not as rapidly as from the stomach. Efforts have been made to overcome these objections, as the value of quinin, hypodermically, in pernicious forms of malarial fever is very great. It is in these malignant types of the disease that the congestions of the mucous membrane of the alimentary tract are so marked, and the circulation through the liver so sluggish. This admits of the quinin remaining in the stomach a long time without being absorbed, and the patient frequently dies before the specific action of the drug can be obtained. Numerous efforts have been made to obviate these difficulties, one of the latest being a formula published in the *Pharmaceutische Centralhalle* for June, 1898, which is as follows:

℞ Hydrochlorate of quinin ..... gr. xlv.
Urethane ..... gr. xxij.
Water ..... q. s. ad. ʒj.

Another formula suggested is:

℞ Hydrochlorate of quinin ..... ʒss.
Phenocoll hydrochlorate ..... ʒss.
Water ..... q. s. ad. ʒj.

In the above preparations the quinin is used in the form of the hydrochlorate, which is more soluble than the sulphate, and its solution is still further aided by the use of the phenocoll and the urethane.

The Treatment of Migraine with Bicarbonate of Sodium.—Gallois is authority for the statement that bicarbonate of sodium is one of the best forms of treatment for migraine. He believes that this disorder is due to an accumulation of uric acid in the blood. There may be some question as to the correctness of this view, but there is certainly experimental evidence which goes to show that in attacks of migraine, the amount of uric acid which is excreted is abruptly checked, to be followed by an increase as the attack of migraine passes off. The theory of other observers is that the uric acid is not the cause of the disorder, but that the presence or absence of the uric acid is an indicator of the extent to which this unknown substance is secreted. Whether the theory of Gallois is correct or not, he claims to have cured three obstinate cases by the use of bicarbonate of soda. He employs it in the form of a dilute solution, adding four drachms of the salt to a quart of water; this quantity is to be taken in each twenty-four hours.

Hiccough.—W. B. STEWART.* Gargling with iced water has given prompt relief in a number of cases of hiccough. In a case of tabes with stomach symptoms, the worst of which was hiccough, this simple remedy gave relief, while other remedies failed. No explanation of the effect is given.

Secondary Syphilis.—DR. JOHN J. CALDWELL, of Baltimore, takes the position that those cases of syphilis which go on from bad to worse are those in which the patient will not take anti-syphilitic treatment regularly, or they are instances where mercury, or the iodides, do not agree with the patient. In cases of secondary syphilis, particularly those where mercury has been given for several months, Dr. Caldwell maintains that great assistance can be brought to the patient by giving him the iodides in a form that is readily assimilable—one that will not disagree with the stomach. No form of the iodides pleases Dr. Caldwell as much as Henry's tri-iodides. This he gives in doses of two drams in water, forty minutes before each meal, and the last thing before retiring at night. Some cases are treated alone with the tri-iodides, but where the stomach is intolerant to mercury he gets the best results from Henry's tri-iodides when no mercury at all is given.

A Substitute for Sugar in Diabetes.—Notwithstanding the large number of remedies brought forward from time to time for the cure of diabetes, the dietetic treatment still continues to occupy the most important part in the management of this disease. In view of the fact that in severe cases the use of starches and sugars is absolutely interdicted, much ingenuity has been exercised in devising substances which would replace these foods. While the attempts to produce substitutes for starch foods have not been very successful, much has been accomplished in the discovery of artificial sweetening agents, which enable the patient to gratify his craving for sugar without producing the harmful effects of the latter. Among the sugar substitutes sycose represents the latest stage in the evolution of a perfect product of this kind. It has a sweetening power 550 times greater than that of cane sugar. Owing to its chemical purity, its freedom from the inert matter found in other substitutes for sugar, its pure taste and solubility, it is eminently adapted for medicinal use. Sycose is therefore well worthy of a careful trial in the treatment of diabetes and of all other diseases in which the use of ordinary sugar in any form is contra-indicated.

Ammonol in Dysmenorrhea.—J. T. ELLIS, Blanket, Texas, says that ammonol never fails to give ease and comfort in cases of dysmenorrhea, and that the physician who uses this agent will never regret it and will receive the thanks of his patients.

*Phila. Med. Jour., September 16, 1899.